



Environmentally-Conscious Redevelopment Creates a New Home Base for World Hunger Organization

Little Rock, Arkansas

Ending world hunger and poverty go hand in hand with preserving and protecting the environment in Little Rock, AR, where Heifer International selected the city's old warehouse district as the home for its new headquarters and educational complex. Through innovative techniques and the assistance of EPA's Targeted Brownfields Assessment (TBA) program, this property was cleaned up and redeveloped using socially and environmentally responsible methods and materials.

Heifer International's new headquarters is located on a property on the banks of the Arkansas River that once blighted the downtown area. The property was occupied by the Union Pacific Railroad rail yard for more than 100 years, during which time a switchyard ran through the property. Chemicals and residues from the railroad ties and tracks gradually contaminated the site. In addition, Superior Trucking utilized this property for more than 50 years for vehicle maintenance and other activities, which contributed to the accumulation of contaminants. More recently, the property was used for light industrial and warehousing operations.

Heifer International, a nonprofit organization dedicated to ending poverty and hunger by providing livestock and training to impoverished families worldwide, had high hopes for cleaning up and redeveloping this property as quickly as possible, with a groundbreaking date of October 2003. To meet this goal, the Arkansas Brownfields Program, the Arkansas Department of Environmental Quality (ADEQ), and the U.S. Army Corps of Engineers (USACE) worked together to conduct a comprehensive site assessment. Assessment work was funded through a \$115,000 award from EPA Region 6's Targeted Brownfields Assessment Program. TBAs are provided through EPA's Brownfields Program and are intended to provide funding and/or technical assistance to enable the restoration of brownfields. In addition, EPA's Contract Laboratory Program came to the aid of the project, providing testing of laboratory samples. Environmental assessments identified trace levels of hydrocarbon, lead, petroleum, and mercury contamination at the property. Cleanup efforts began with the removal of all rail yard ties and tracks. The support provided allowed for redevelopment to begin as scheduled, and the new headquarters opened in January 2006.

Heifer International utilizes the word "recycle" in all aspects of this redevelopment project. As Jo Luck, Heifer's president and CEO stated, "If we're going to have a lasting impact on ending world hunger, then everything we do must renew the earth and not deplete it." The designers of Heifer's new headquarters and education complex took this



The Heifer International headquarters building under construction.

JUST THE FACTS:

- Assessment work was funded through a \$115,000 award from EPA Region 6's Targeted Brownfields Assessment Program. Environmental assessments identified trace levels of hydrocarbon, lead, petroleum, and mercury contamination at the property.
- The design of the facility incorporated recycled materials into its construction including the use of old masonry for gravel; recycled steel, carpet, and flooring; and a rainwater collection system.
- Heifer International was awarded a \$50,000 Innovation Demonstration Grant from EPA's Office of Solid Waste and Emergency Response (OSWER) for their innovative parking lot design that works with the surrounding constructed wetland environment.

"We chose a Brownfields property because it helps tell our story."

—Gerald Cound
Director of Facilities
Heifer International

quote to heart, as the design of the facility incorporated recycled materials into its construction. Instead of wasting the masonry from abandoned buildings onsite, the material was crushed into gravel that was reused in redevelopment. Recycled steel was also utilized, and the flooring was made of recyclable materials. A four-story water collection tower captures rainwater from the roof. The lighting fixtures within the building dim automatically when natural light increases in order to maximize energy savings. The narrow, 60-foot-wide design, glass skin, and light shelves allow staff to work in natural light, reducing electrical dependence.

Overall, the building's design enables its inhabitants to use up to 40 percent less energy than a conventional office building of similar use and size. The innovative methods used have attracted the attention of architects and builders alike. In light of their vested interest, as well as a desire to further its commitment to sustainable design, Heifer registered the design for a LEED (Leadership in Energy & Environmental Design) certification rating from the U.S. Green Building Council. The LEED system is a voluntary national standard developed to create sustainable buildings through green design strategies. The brownfield strategy and the overall design were also featured as examples of environmental stewardship in *Architectural Record* magazine. As a result of its efforts, Heifer International was named a "Green Building on Brownfields" pilot project by the U.S. EPA in September 2002. This Pilot program offered additional technical, financial, planning, outreach, and design expertise as needed throughout this redevelopment project.

One of the greatest challenges Heifer faced during redevelopment was the incorporation of a 4.2-acre, 337-space parking lot. Many conventional paved parking lots are impervious to rainwater, which causes rapid runoff, erosion, and flood damage during severe storms. Contamination can also result from parking facilities due to oils, metals, and other vehicle pollutants getting washed out into surrounding areas during storms. To alleviate these problems, Heifer International, in conjunction with U.S. EPA Region 6, the State of Arkansas, Pulaski County, the City of Little Rock, Downtown Partnership of Little Rock, and several consulting corporations, developed an innovative parking lot design that would work with the surrounding constructed wetland environment. Heifer built small "green" parking plazas that move storm water through a runoff collection system that collects, filters, and returns it back into the environment through drip irrigation. Landscaped islands surrounding these parking lots feature plants selected for their ability to remove pollutants from water. The parking lot design also encourages the use of alternative transportation by providing bike racks and space for a trolley stop that will connect the property to downtown Little Rock, which is currently under construction. None of this would be possible without a \$50,000 Innovation Demonstration Grant awarded to Heifer International from EPA's Office of Solid Waste and Emergency Response (OSWER) in October 2003. Heifer hopes that this innovatively designed parking lot will serve as an environmental educational tool that encourages visitors to think about the environmental impact of parking lots.

The city and surrounding areas have already benefited from Heifer International's new "green" facility through the creation of approximately 220 jobs in the Little Rock area as of July 2006, with new employees continually being added to the facility. Not only will the area benefit from the new jobs, but also through increased tourism opportunities, such as public events at the educational complex, which they expect to attract as many as 250,000 visitors each year. Every individual will have the opportunity to learn about world cultures, hunger and poverty solutions, and will be made aware of the importance of a healthy environment and the role that it plays in these issues. The structure and design of the facility itself will serve as a learning tool for everyone, demonstrating how properties can be improved in ways that not only protect, but preserve the environment. As Gerald Cound, the Director of Facilities at Heifer International stated, "We chose a Brownfields property because it helps tell our story," which would not have been possible without the assistance provided by EPA's regional TBA program.

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<http://www.epa.gov/brownfields/>